

IN THE CLAIMS

This listing of claims replaces all prior listings:

1-12. (Cancelled)

13. (Currently amended) A method for preparation of a gel electrolyte battery in which a battery device is accommodated in an exterior material, said exterior material comprising of a laminated film and sealed therein by heat fusion, said method comprising:

(a) a battery device preparation step of layering a positive electrode, and a negative electrode via and a gel electrolyte to form said battery device;

(b) an accommodating step of accommodating the battery device from said battery device preparation step (a) within said laminated film and sealing said laminated film;

(c) a first heating step of heating said battery device under a pressured state;

(d) a charging step of charging the battery device accommodated in said laminated film in said accommodating step (b), wherein said step (d) occurs after step (c);

(e) a discharging step of discharging the battery device following the charging step (d); and

(f) a second heating step of heating said battery device under a pressured state, said second heating step (f) occurring after said discharging step (d) from said discharging step under a pressured state.

14. (Canceled)

15. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in the second heating step (f) ~~for the battery device from said discharging step,~~ the pressure applied to the battery device is ~~set in a range from~~ at least 490 to and at most 2450 kPa.

16. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in the second heating step ~~(f) for the battery device from said discharging step~~, the temperature of heating the battery device is ~~set in a range from~~ at least 50 °C to at most 105 °C.

17. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in the second heating step ~~(f) for the battery device from said discharging step~~, the pressuring and heating are applied through a resin of heat-resistant rubber ~~to the battery device accommodated in the laminate film exterior material~~.

18. (Original) The method for preparation of a gel electrolyte battery according to claim 17 wherein the heat-resistant rubber is silicon rubber.

19. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13, wherein the exterior material ~~is~~ comprises a laminated film, ~~said laminated film comprising~~ comprised of an Al foil on both sides of which are formed and resin layers on both sides of said Al foil.

20. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in said battery device preparation step (a), the gel electrolyte ~~is made up of~~ comprises a matrix polymer, a non-aqueous solvent and an electrolyte salt, and wherein ~~the~~ a ratio B/A is at most 1 wt%, B being of the amount of the non-aqueous solvent boiling at a temperature of at most 110 °C or lower under ambient pressure (B), A being to the total amount of the non-aqueous solvent contained in the gel electrolyte (A) or B/A is set to 1 wt% or less.

21. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in said battery device preparation step (a), the matrix polymer in a gel electrolyte comprises at least one material selected from the group of polyacrylonitrile, polyethylene oxides, hexafluoropropylene, tetrafluoroethylene, vinyl acetate, methyl methacrylate, butyl methacrylate, methyl acrylate, butyl acrylate,

itaconic acid, hydrogenated methyl acrylate, hydrogenated ethyl acrylate, acrylic amide, vinyl chloride, vinylidene fluoride, vinylidene chloride, acrylonitrile-butadiene rubber, acrylonitrile-butadiene styrene resin, acrylonitrile-polyethylene chloride propylene diene styrenic resin, acrylonitrile-vinyl chloride resin, acrylonitrile-methacrylate resin, acrylonitrile-acrylate resin, polyether modified siloxane and copolymers thereof.

22. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in said battery device preparation step (a), a polyolefinic micro-porous separator is arranged, along with the gel electrolyte, between the positive and negative electrodes.

23. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, in said battery device preparation step (a), a strip-like positive electrode and a strip-like negative electrode are layered together via a gel electrolyte and coiled longitudinally to form a battery device.

24. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 23 wherein, in said battery device preparation step (a), a micro-porous separator is arranged between the strip-like positive electrode made up of the positive active material layer and a gel electrolyte layer formed thereon and the strip-like negative electrode made up of the negative active material layer and a gel electrolyte layer formed thereon.

25. (Currently amended) The method for preparation of a gel electrolyte battery according to claim 13 wherein, ~~in said battery device preparation step (a),~~ comprises:

(a1) layering a strip-like positive electrode on each surface of a positive electrode collector, made up of the said positive electrode comprising (i) a positive active material layer containing comprising a lithium compound oxide and (ii) a gel electrolyte layer formed thereon on said positive active material layer, is layered on each surface of a and said positive electrode collector made up of comprising a metal foil; and

(a2) layering a strip-like negative electrode on each surface of a negative electrode collector, made up of the said negative electrode comprising (iii) a negative

active material layer ~~containing~~ comprising a material capable of doping/undoping lithium and (iv) a gel electrolyte layer formed ~~thereon~~ on said negative active material layer, ~~is layered on each surface of a~~ and said negative electrode collector ~~made up of~~ comprising a metal foil;; and

(a3) layering together and coiling longitudinally said strip-like positive electrode and the strip-like negative electrode ~~being layered together and coiled longitudinally~~ to form a battery device.